

SUB A3
CONCL

a read control component configured to read the data frames from the buffer at a reading frequency and according to a read pointer; and

a frequency controller configured to determine a relation between a value of the write pointer and a value of the read pointer and to indicate the reading frequency based on the determined relation.

SUB A4
CONT'D

14. (Amended) The system of claim 12 wherein the reading frequency is equal to the source signal frequency.

15. (Amended) The system of claim 12, wherein the frequency controller includes:
a detector configured to detect a buffer overflow condition or a buffer underflow condition based upon the determined relation.

17. (Amended) The system of claim 16 wherein the frequency controller is configured to indicate the reading frequency in accordance with one of the first signal and the second signal.

18. (Amended) The system of claim 12, wherein the frequency controller includes a frequency control element configured to control the read control component to read the data frames at the reading frequency.

19. (Amended) The system of claim 18 wherein the frequency control element comprises a phase locked loop.

20. (Amended) The system of claim 18 wherein the frequency control element is configured to respond to both a buffer overflow condition and a buffer underflow condition.

SUB
A5
CONCL-

21. (Amended) A method of controlling a frame rate of a display signal for a destination video display device; the method comprising:

receiving an image source signal comprising source data;

writing the source data to a buffer at a source frequency and updating a write pointer;

reading the source data from the buffer at a display frequency and updating a read pointer;

comparing information related to the write pointer and information related to the read pointer;

responsive to the comparing, detecting one of a buffer overflow condition and a buffer underflow condition;

modifying the source data in accordance with capabilities of the destination video display device; and

responsive to the detecting, adjusting the display frequency in accordance with the detected condition.

SUB
A6
CONCL-

24. (Amended) The method of claim 23 wherein the adjusting comprises identifying one of the plurality of display frequencies to correct the detected condition.

SUB A7
CONT'D

31. (Amended) A frame rate control system configured to provide display signals to a video display device; the system comprising:

a source signal interface configured to receive an image source signal;

a buffer;

a write control component configured to write data frames of the image source signal to the buffer according to a write pointer; and

SUB
A7
CONCL. a read control component configured to read the data frames from the buffer at a reading frequency and according to a read pointer; and

a frequency controller configured to determine a relation between a value of the write pointer and a value of the read pointer and to indicate the reading frequency based on the determined relation.

SUB
A8
CONCL. 33. (Amended) The system of claim 31 wherein the reading frequency is equal to a frequency of the image source signal.

34. (Amended) The system of claim 31, wherein the frequency controller includes a frequency control element configured to control the read control component to read the data frames at the reading frequency.

35. (Amended) The system of claim 34 wherein the frequency control element comprises a phase locked loop.

36. (Amended) The system of claim 31, wherein the frequency controller includes:
a detector configured to detect a buffer overflow condition or a buffer underflow condition based upon the determined relation.

37. (Amended) The system of claim 36, wherein the frequency controller includes a frequency control element configured to control the read control component to read the data frames at the reading frequency, and

wherein the frequency control element is responsive to signals received from the detector representative of the buffer overflow condition or the buffer underflow condition.

Sub
A-9
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39. (Amended) The computer readable medium of claim 38 further encoded with data and computer executable instructions causing an apparatus executing the instructions to:

receive an analog image source signal from a source;

convert the analog image source signal to a digital source signal; and

generate the video frame source data from the digital source signal.

40. (Amended) The computer readable medium of claim 38 further encoded with data and computer executable instructions causing an apparatus executing the instructions to:

configure a read control component to operate at a selected one of a plurality of display frequencies supported by the display device.

41. (Amended) The computer readable medium of claim 38 further encoded with data and computer executable instructions causing an apparatus executing the instructions to:

apply a scaling algorithm operative to modify the source data in accordance with capabilities of the display device.

42. (Amended) The computer readable medium of claim 38 further encoded with data and computer executable instructions causing an apparatus executing the instructions to:

increase the display frequency responsive to a buffer overflow condition; and

decrease the display frequency responsive to a buffer underflow condition.

43. (Amended) The computer readable medium of claim 41 further encoded with data and computer executable instructions causing an apparatus executing the instructions to:

increase the display frequency when the scaling algorithm adds data to the source data; and

SUB
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CONCL

decrease the display frequency when the scaling algorithm deletes data from the source data.

See the attached Appendix for the changes made to effect the above claims.

Please add the following new claims: ✓

SUB
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CONCL

44. (New) A method of video signal processing, ~~said method comprising:~~
writing video data to a buffer;
reading a portion of the video data from the buffer; and
transferring a display signal based on the portion of the video data to a display device,
wherein a frequency of the display signal is based on an amount of video data that has
~~not yet been read from the buffer.~~

45. (New) The method of video signal processing according to claim 44, said method comprising detecting one of an overflow and an underflow condition of the buffer.

46. (New) The method of video signal processing according to claim 44, wherein the display signal is based on a scaled version of the read video data.

47. (New) The method of video signal processing according to claim 44, wherein the frequency of the display signal is indicated by a phase-locked loop.